



February 15, 2008

Fourth Quarter 2007

Total Fund Review

Arizona State Retirement System

Terry Dennison, Los Angeles

Economic Environment

Economic Highlights Fourth Quarter 2007

Positive

Fed cut rate by 50 basis points, bringing the Fed Funds rate to 4.25%

Production capacity utilization still 0.4% above the 1972 – 2006 average

The dollar stabilized in November and December

Oil prices reached nearly \$100/barrel but finished the year in the mid-\$90s

Negative

Economic growth slowed down; initial government estimate of 4Q GDP growth was 0.6%

Increasing inflation: CPI +4.1%, CPI less food and energy +2.4%

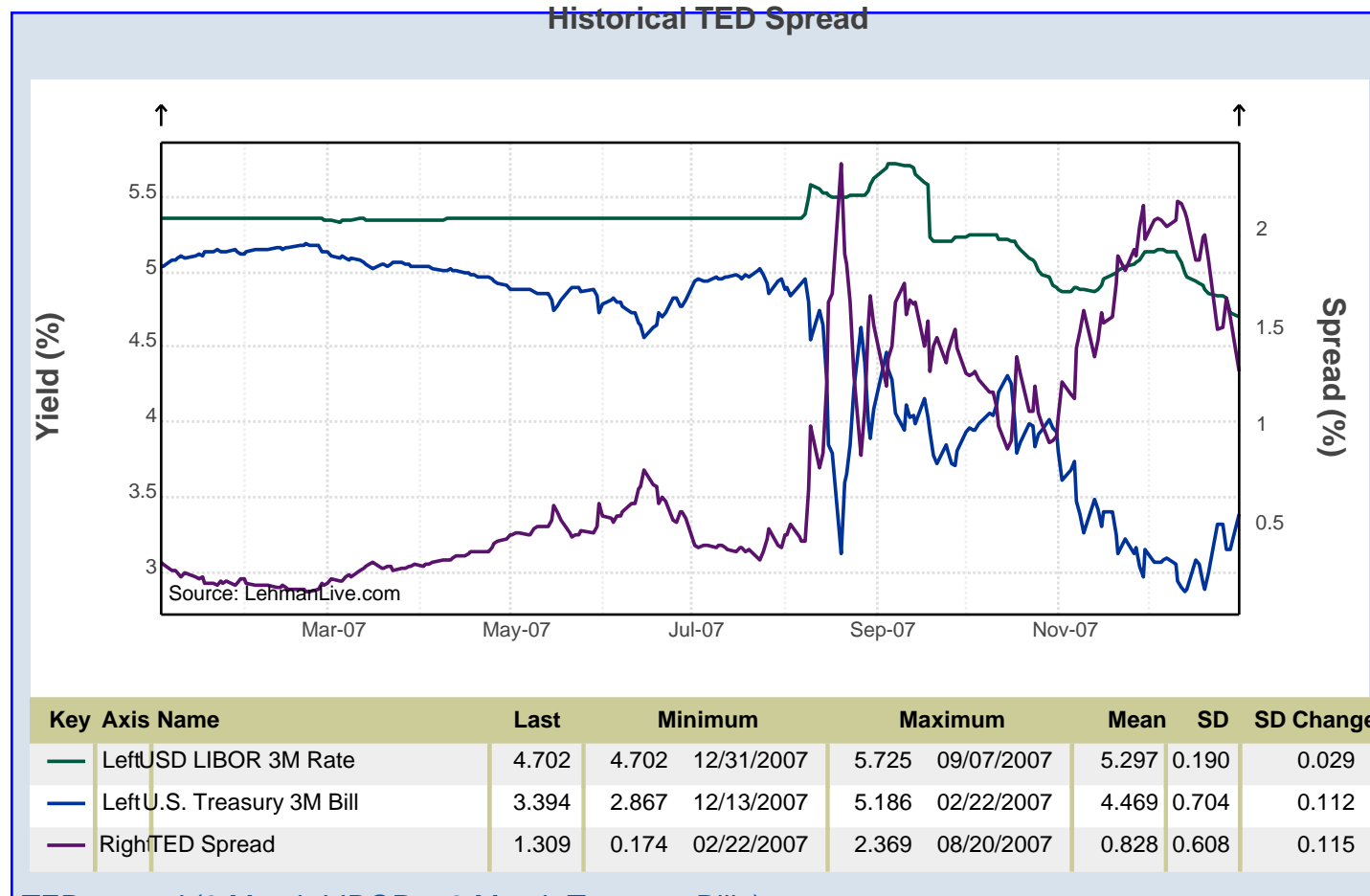
Consumer spending growth at slowest pace since 2002

Unemployment rate 5%, weakest level since November 2005

Housing market remained bleak; unsold homes numbered at record highs; home prices fell at a 12% annual rate

TED Spread Remained at 1.0% or Higher

Continued Hesitancy of Banks to Lend to Each Other;
Typically, Spread Is Around 40 bps



TED spread (3 Month LIBOR – 3 Month Treasury Bills)

Liquidity Crunch

Hesitancy of Banks to Lend to Each Other

Many financial firms had to re-capitalize over the past quarter as they wrote off billions of dollars in losses from sub-prime exposure. These firms included big financial service companies such as Bear Stearns, Citigroup, Merrill Lynch, Morgan Stanley, and UBS; bond insurers such as MBIA; and internet brokerage firms such as E-Trade. Most of these cash infusions came from sovereign wealth funds, state-controlled investment banks and private equity funds that focus on distressed situations

Trouble still looms for some of the financial services firms, particularly bond insurers that insured CDOs such as AMBAC. If these firms lost their AAA rating there would be a broader sell-off in mortgage-related securities

Re-capitalization of Financial Service Firms

Financial Institution	Amount of Capital Received	Investor
Bear Stearns	\$1.0 billion	Citic Securities Co. (State controlled investment bank of China)
Citigroup	\$7.5 billion	Abu Dhabi Investment Authority
E*Trade	\$2.5 billion	Citadel Investment Group
Merrill Lynch	\$6.2 billion	Temasek Holdings Ptd Ltd; Davis Selected Advisors
Morgan Stanley	\$5.0 billion	China Investment Corp
UBS	\$11.5 billion	Government of Singapore Investment Corp; anonymous Middle East investor
MBIA	\$1.0 billion	Warburg Pincus

Source: Bloomberg, CNBC and MarketWatch

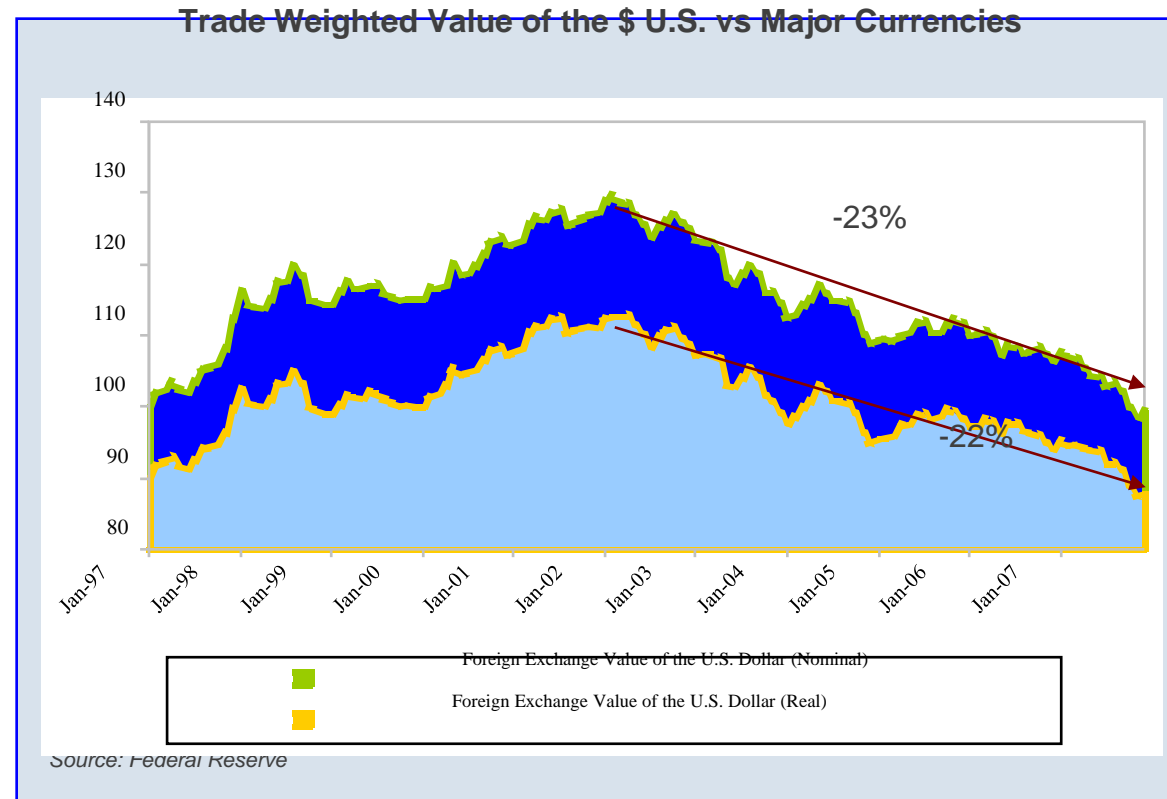
Currency

Decline of the U.S. Dollar

The U.S. dollar has fallen more than 23%, in nominal terms, from its peak in the first quarter of 2002 on a trade-weighted basis

Weakness of the U.S. currency since 2002 is largely due to the strength of emerging market currencies

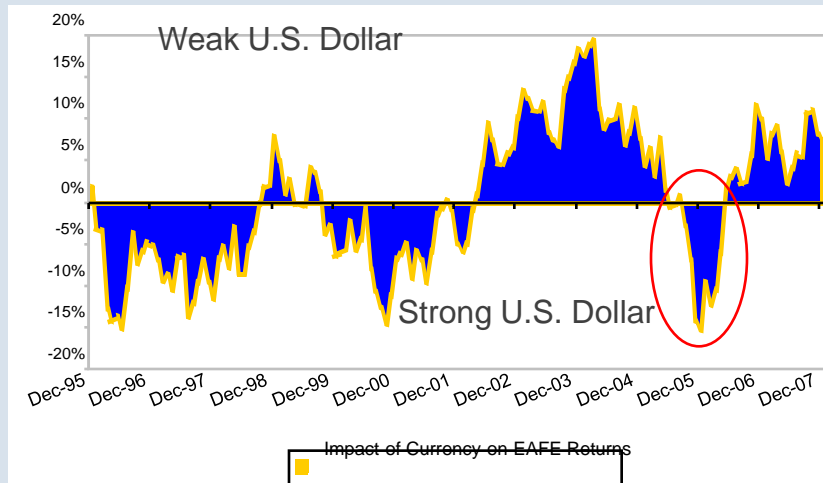
The U.S. dollar began falling vs. currencies of other developed economies in late 2006 after posting a strong gain throughout 2005, a period during which the Fed raised the Fed Funds rate



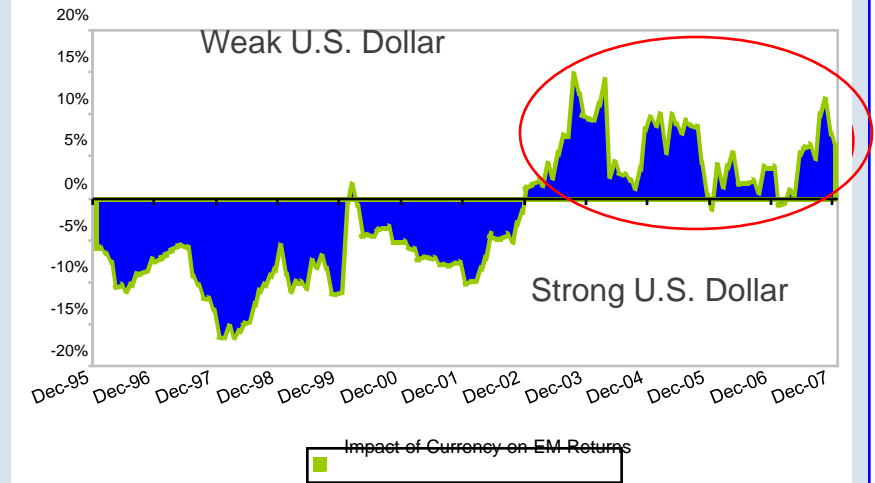
Currency

Impact on Currency for Developed and Undeveloped Markets

Rolling 1-year Impact on Currency for MSCI EAFE Index

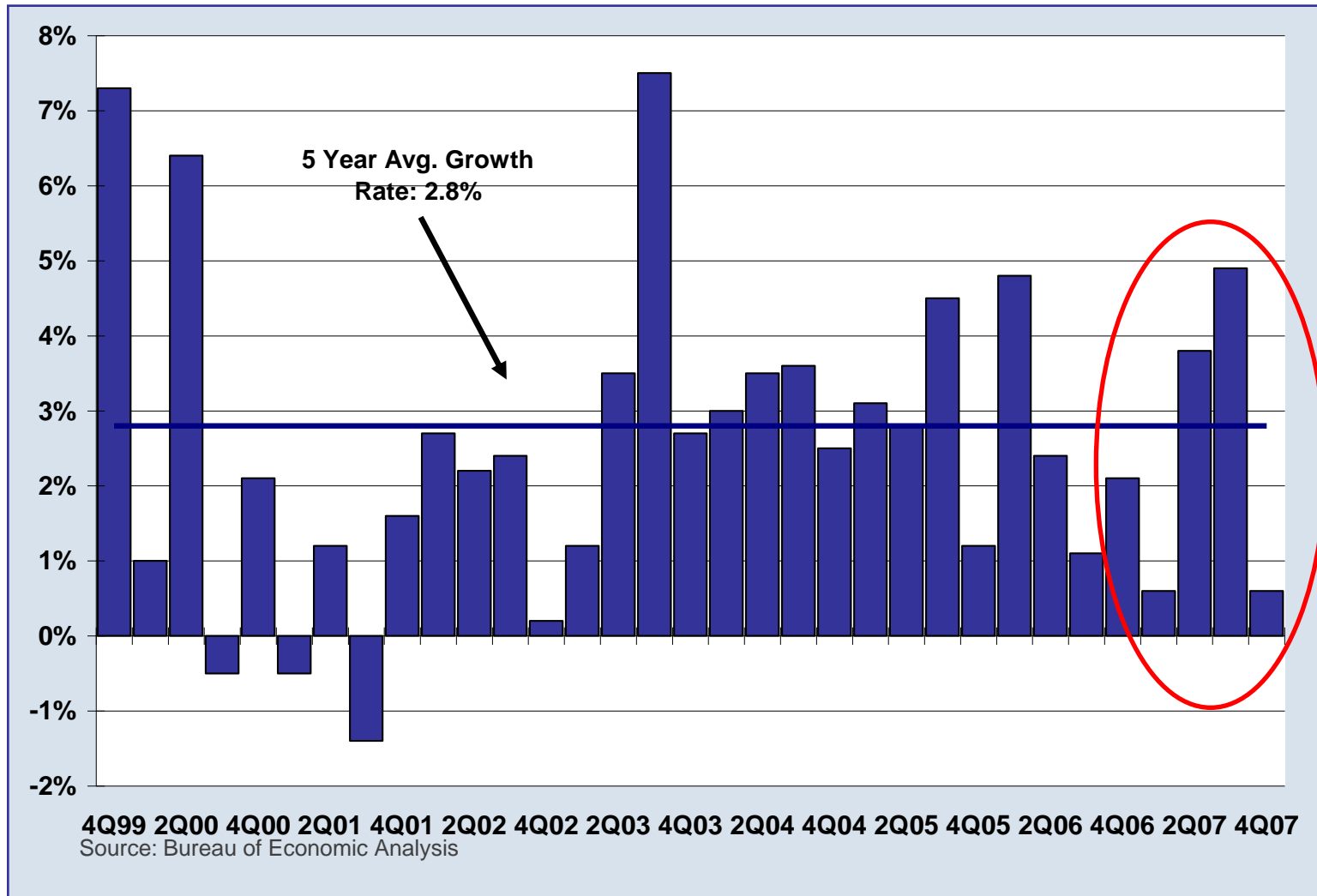


Rolling 1-year Impact on Currency for MSCI EM Index



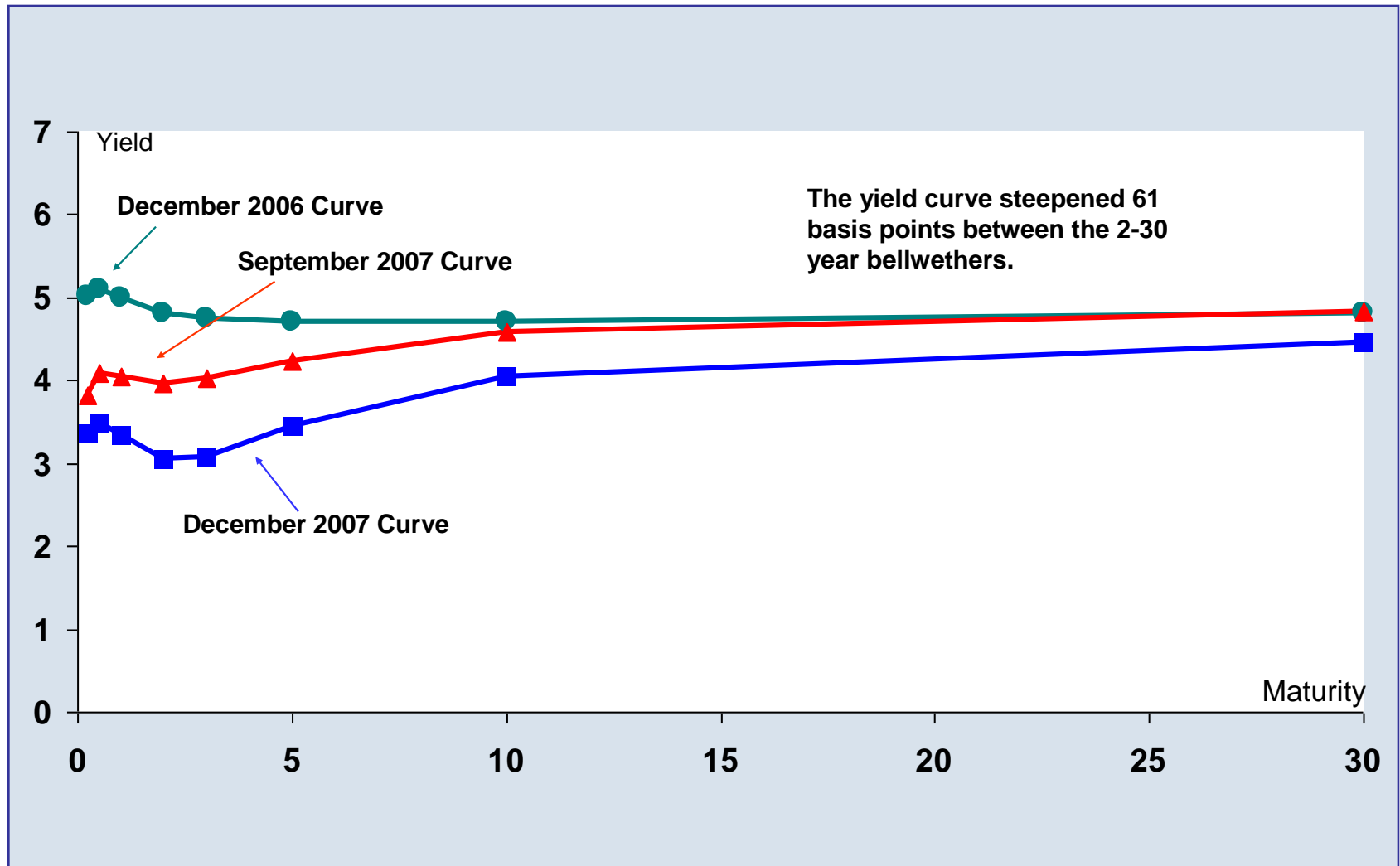
Economic Growth Slowed Down

Weak Consumer Spending and Ongoing Credit Turmoil



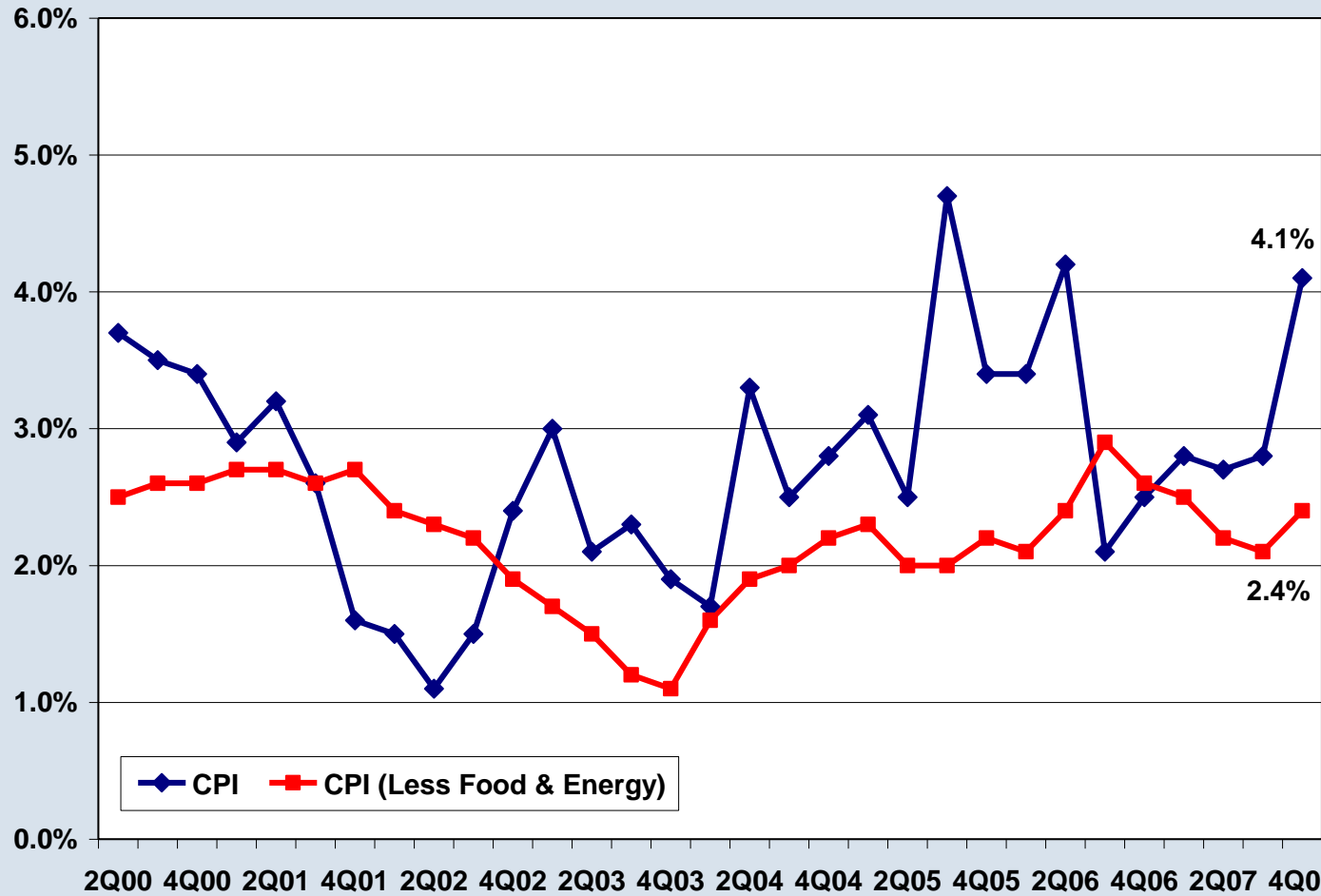
The Yield Curve Steepened During the Quarter

Two-Year Treasury Fell 92 Basis Points



Inflation Is Rising

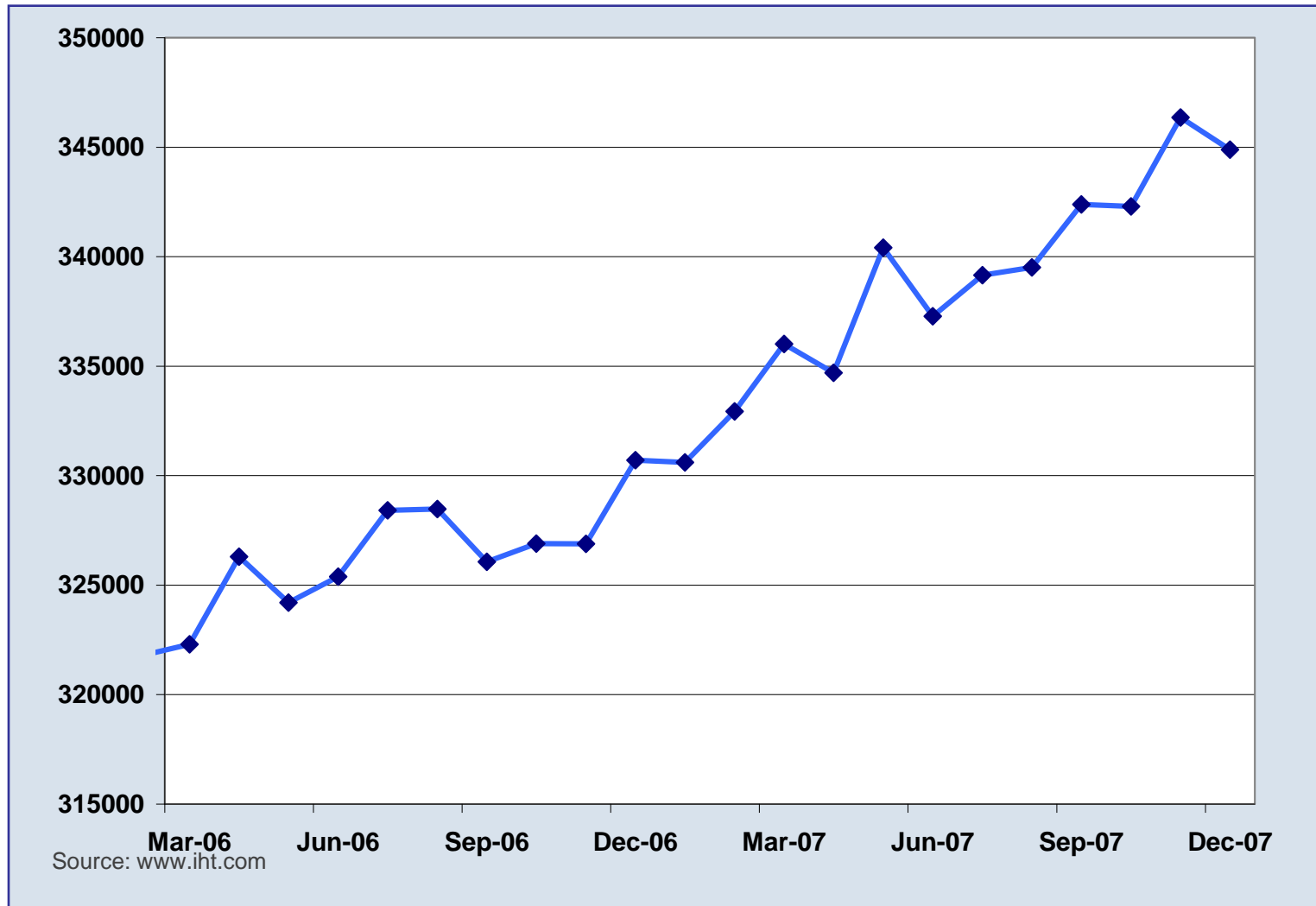
Core Inflation at a Moderate Pace



Source: U.S. Department of Labor Bureau of Labor Statistics. All Urban Consumers. Year-over-year. Seasonally Adjusted

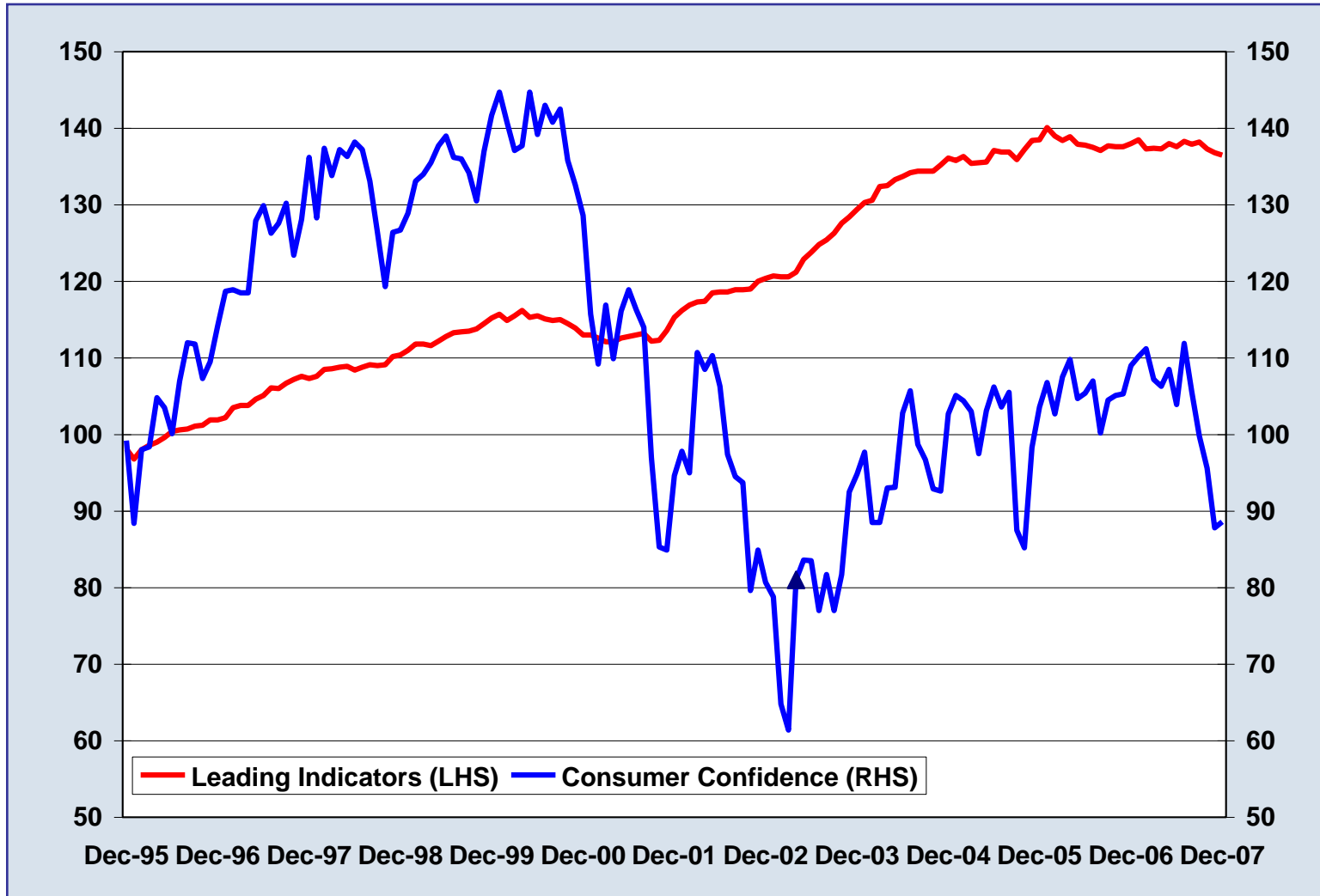
Retail Sales Are Decreasing

Concerns About a Recession



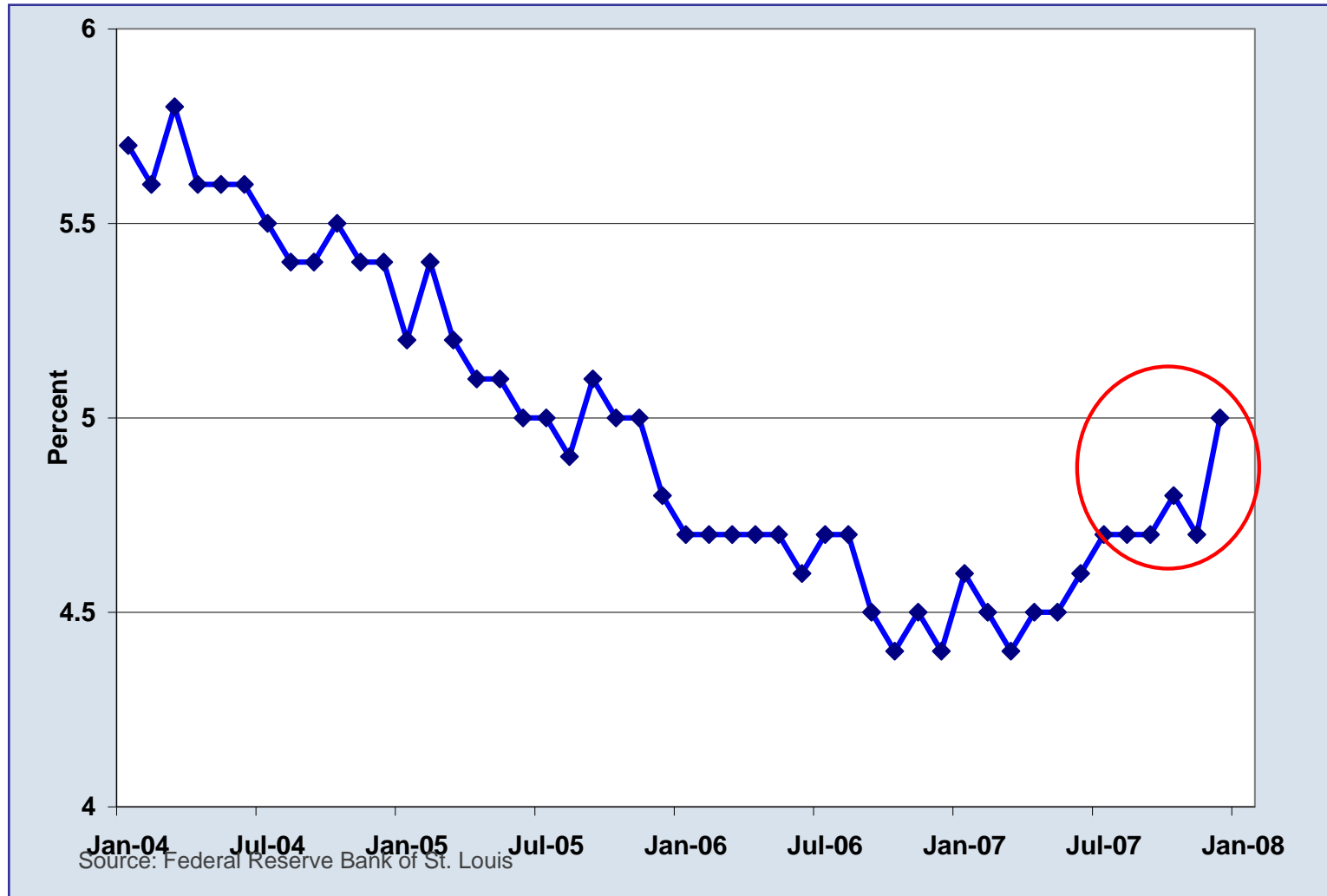
Leading Indicators Are Weakening

Concerns Over Higher Energy Prices, Jobs and the Overall Economy



Unemployment Rate Jumped Up

Highest Level Since November 2005



Oil Continues to Rise

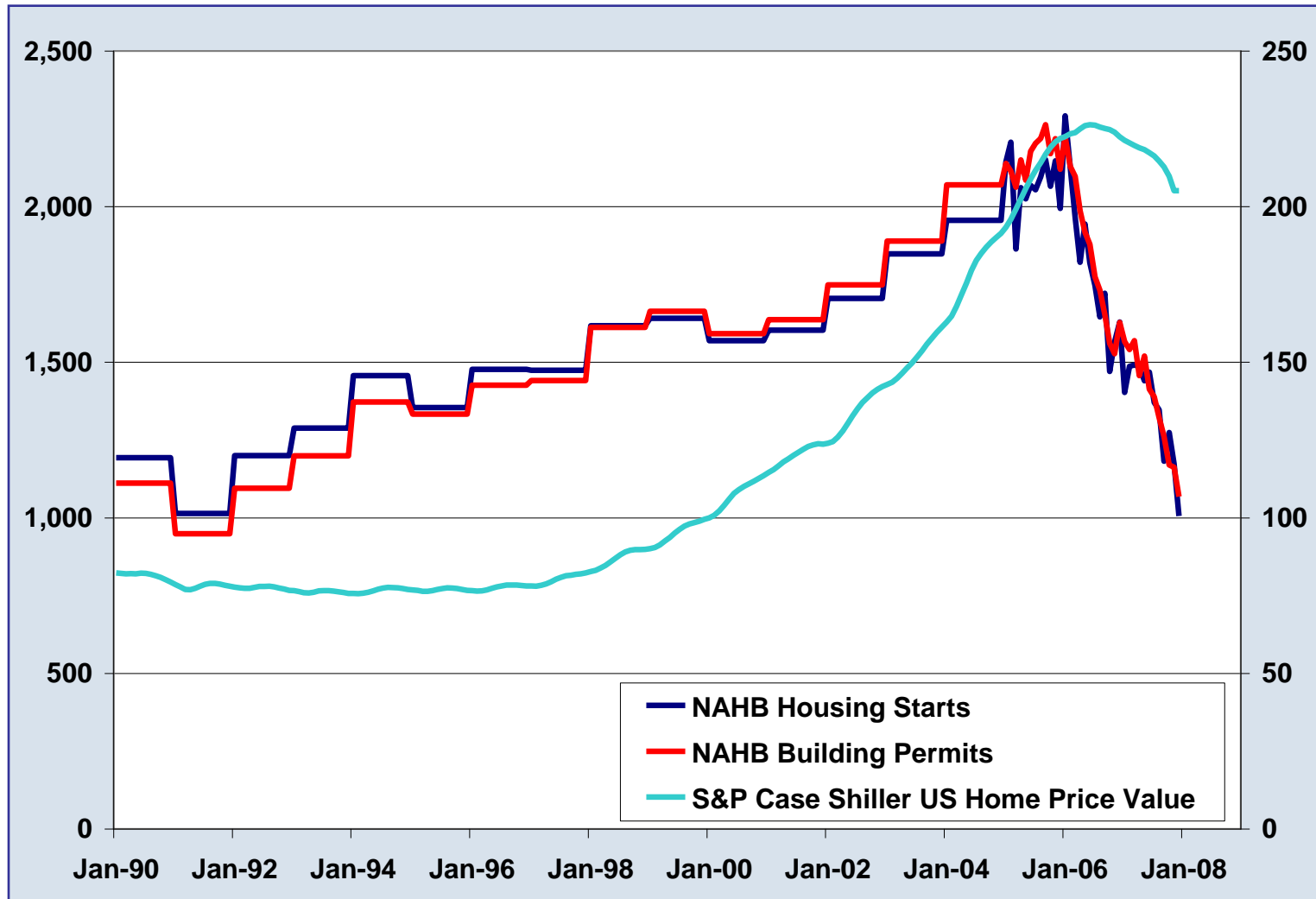
Reached Nearly \$100/Barrel Before Finishing the Year in the Mid-\$90s



Source: Bloomberg

Housing Declined Further

Housing Starts and Building Permits Near Lowest Point Since Inception



Securities Markets

Market Highlights Fourth Quarter 2007

Positive

Growth outperformed value across all market capitalizations

Utilities and energy were top-performing sectors

International equity markets outpaced U.S. markets

Emerging markets continued to rally

Investment-grade bonds and Treasuries posted positive results

Hedge funds (+1.8%) outperformed equity markets

Negative

Domestic equity markets posted negative returns with small cap as weakest performer

Financial services and consumer discretionary sectors were hit hardest again

Japan edged down 6.1%

High-yield bonds: average spread to Treasuries widened to 605 bps

The FTSE NAREIT Index plunged 12.7%

Private equity: slowdown in volume due to difficulties in financing

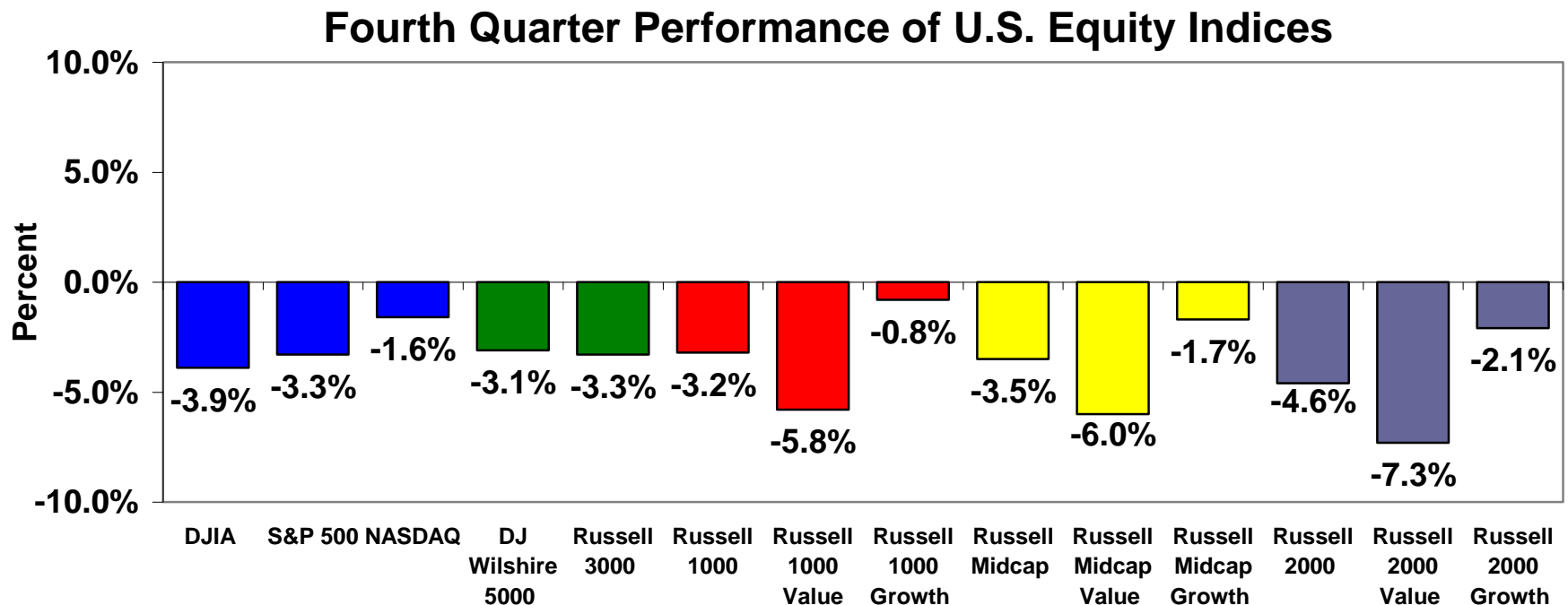
U.S. Equity Struggles Across All Market Caps

Value, Core, and Growth Stocks Posted Losses

With increasing fears of a recession combined with turmoil in the credit markets, U.S. stocks reported declines across all market caps (large, mid, small) and investment styles (value, core, growth)

Growth-oriented stocks outperformed their value counterparts as investors fled from value in favor of growth

Large-cap equities generally outperformed mid- and small-cap equities



Large-Cap Stocks Outperformed Mid- and Small-Cap

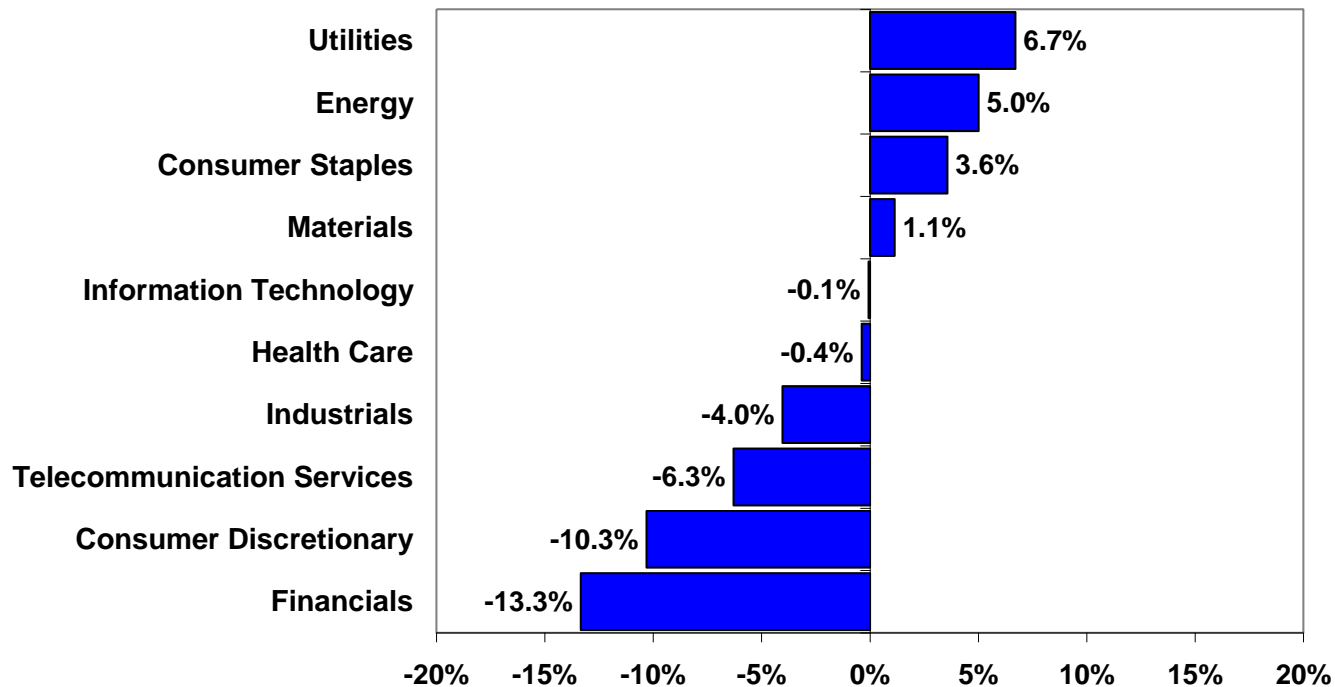
Poor Performance in Financials and Consumer Discretionary Sectors

Six out of 10 sectors had losses for the quarter

Financials was the hardest-hit sector from the continuing effects of the sub-prime mortgage fallout

Consumer discretionary stocks were also hit hard for the quarter because of a decrease in consumer spending deriving from a decline in housing prices and an increase in energy prices

Fourth Quarter GICS Sector Performance - Russell 1000 Index



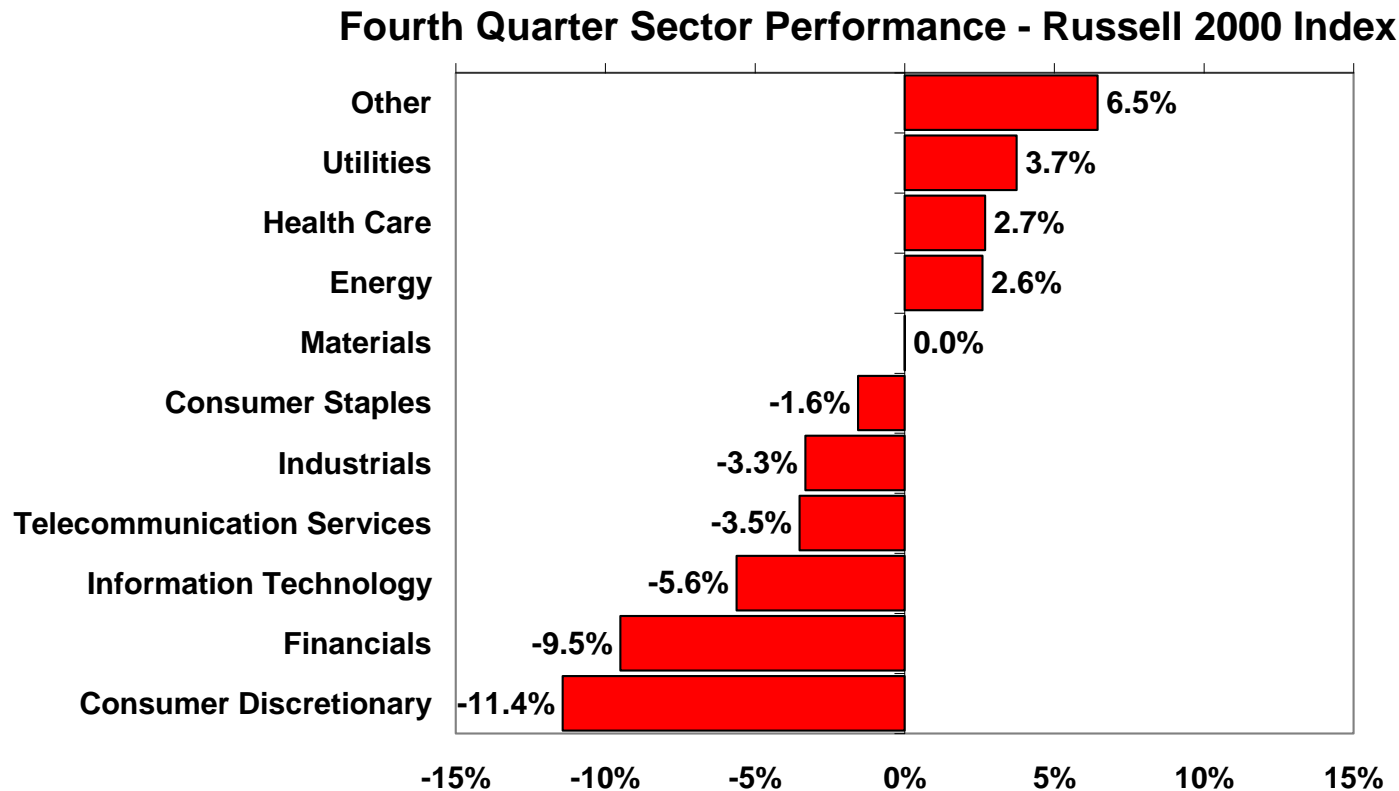
Small-Cap Stocks Finished in the Red

Poor Performance in Consumer and Financial Stocks

Small-cap value stocks were the weakest performers, losing 7.3%

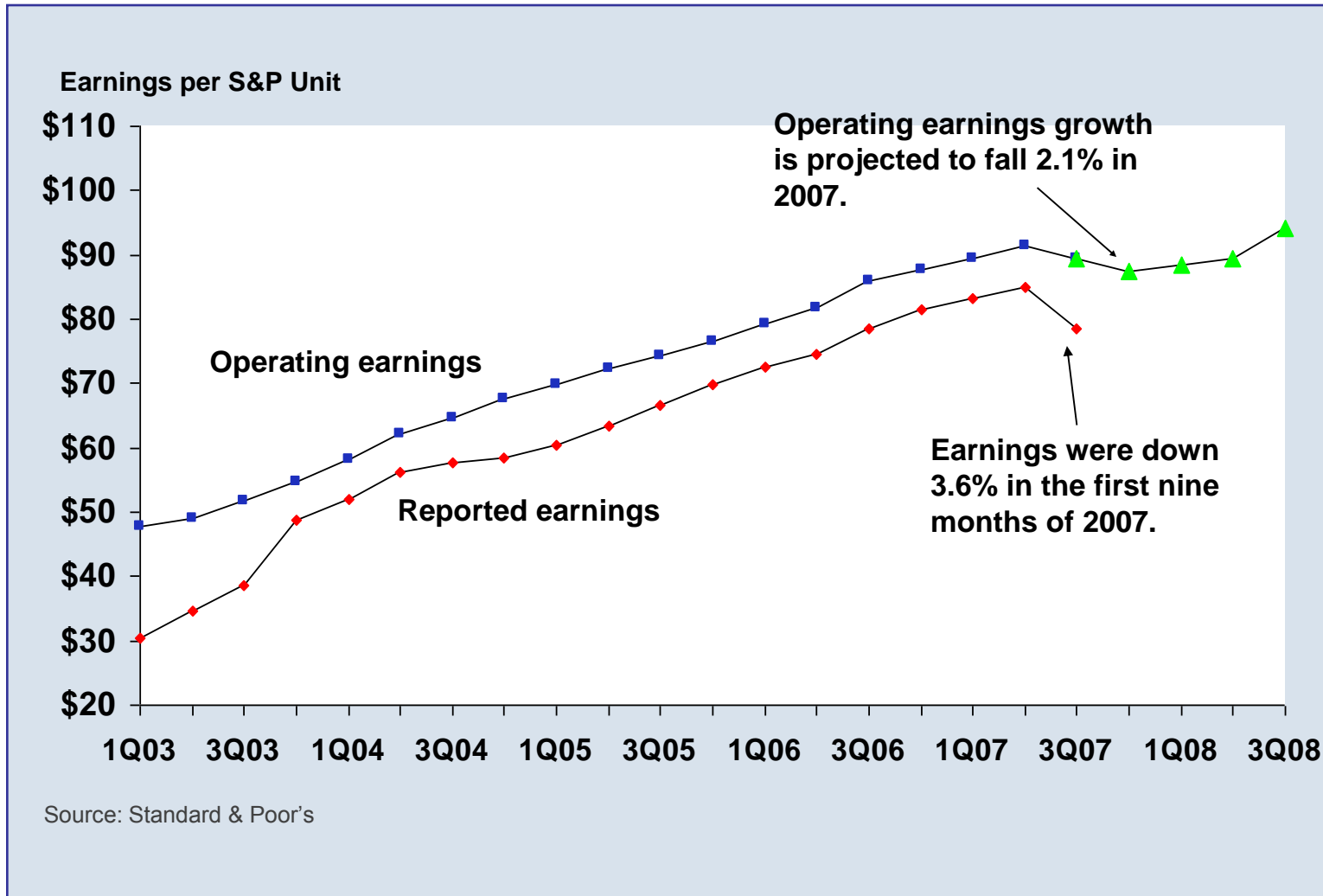
Growth stocks continued to outperform value because of dominant financial sector weighting in value

As with large-cap stocks, utilities and energy did well



Earnings Decline

S&P 500 Trailing 4Q Earnings per Unit



Fourth Quarter Provided Negative Results

Growth outperformed value across all market capitalizations

Small cap lagged mid- and large-cap stocks

4Q2007	Growth	Core	Value
Large	-0.77	-3.23	-5.80
Mid	-1.70	-3.56	-5.99
Small	-2.12	-4.59	-7.28
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

One-Year Results Were Mixed

Large-cap growth was top performing for the first year since 1999

Small cap value struggled most, by far

1-Year Returns	Growth	Core	Value
Large	11.82	5.78	-0.17
Mid	11.43	5.60	-1.43
Small	7.01	-1.60	-9.81
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Three-Year Results Are Moderate

Returns for all asset classes are in line with long-term expectations

Mid-cap returns were ahead across all styles

3-Year Returns	Growth	Core	Value
Large	8.69	9.09	9.32
Mid	11.40	11.10	10.11
Small	8.09	6.77	5.24
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Cumulative 3-Year Results: Mid-Caps Gain Leadership

Generally convergence across style and capitalization

Small-cap value lagged the other segments

Cumulative 3-Year	Growth	Core	Value
Large	28.40	29.82	30.65
Mid	38.25	37.13	33.50
Small	26.29	21.72	16.56
Note: Russell 1000, Mid-Cap, 2000 Indices: Value, Core, Growth			

Five-Year Results Are Still Considerably Above Expectations

Large growth is coming back

Mid-cap is superior across all capitalization ranges

5-Year Returns	Growth	Core	Value
Large	12.11	13.44	14.62
Mid	17.91	18.22	17.91
Small	16.48	16.23	15.79
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Cumulative 5-Year Results Nearly All Represent a Doubling or More

Large cap continues to make up performance

Mid cap is outperforming small- and large cap

Spread between styles begins to close

Cumulative 5-Year	Growth	Core	Value
Large	77.10	87.86	97.83
Mid	127.90	130.92	127.90
Small	114.42	112.12	108.14
Note: Russell 1000, Mid-Cap, 2000 Indices: Value, Core, Growth			

Non-U.S. Equities Outpaced Domestic Market

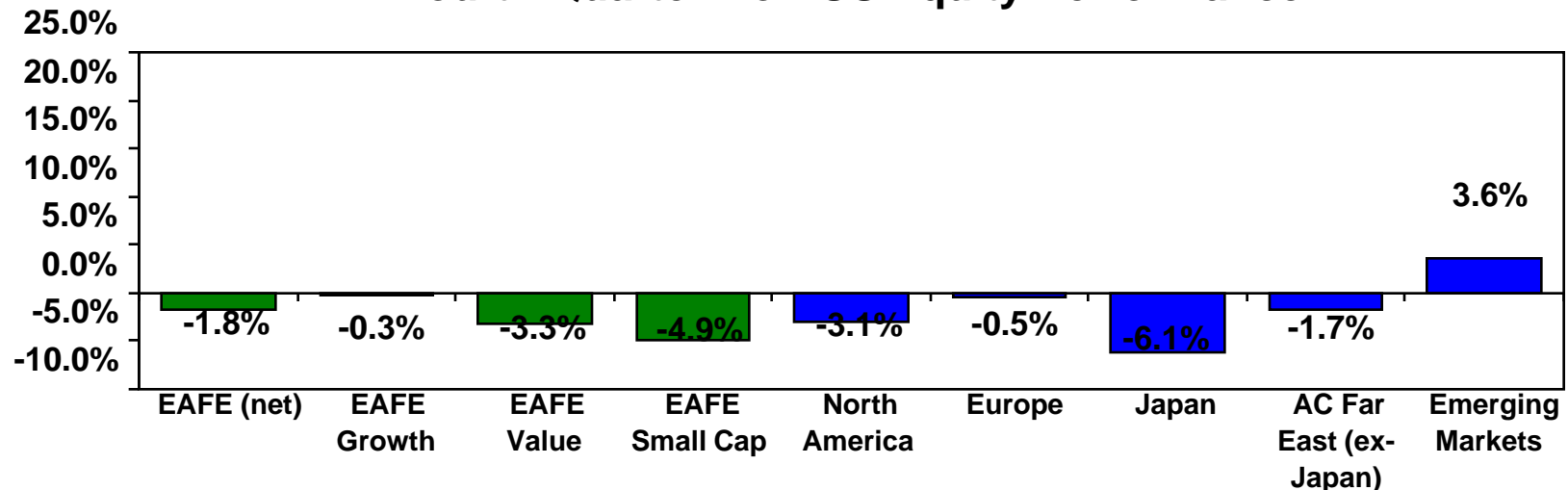
A Weak U.S. Dollar Strengthens Foreign Markets

MSCI EAFE declined 1.8% in the fourth quarter, the first loss since 2000. Most countries posted losses or were flat for the quarter. However, Spain, Portugal, Hong Kong, Greece and Germany posted strong results.

EAFE, Europe and Japan posted much more negative returns in local currency terms; however, the continued dollar depreciation helped most markets realize less negative results

Emerging markets continued to rally, with strong performance in Europe and the Middle East

Fourth Quarter Non-US Equity Performance



Source: MSCI

International Equity Markets' Convergence Across Style

Short term performance is mixed

Long term performance well above long-term expectations

Spread between developed and undeveloped markets begins to close

As of Dec 2007 (Q4)	3 Months	1 Year	3 Years	5 Years
MSCI AC Wld ex US	-0.66	16.65	19.88	24.02
MSCI AC Wld ex US Growth	0.59	21.03	20.42	22.33
MSCI AC Wld ex US Value	-1.97	12.31	19.30	25.63
MSCI EAFE	-1.75	11.17	16.83	21.59
MSCI EAFE Growth	-0.28	16.45	17.29	19.85
MSCI EAFE Value	-3.30	5.96	16.27	23.21
MSCI EAFE SC	-4.85	1.45	15.16	26.37

U.S. Fixed Income Returns Remain Strong

The 2- to 10 Year Yield Slope Steepened by 36 bps

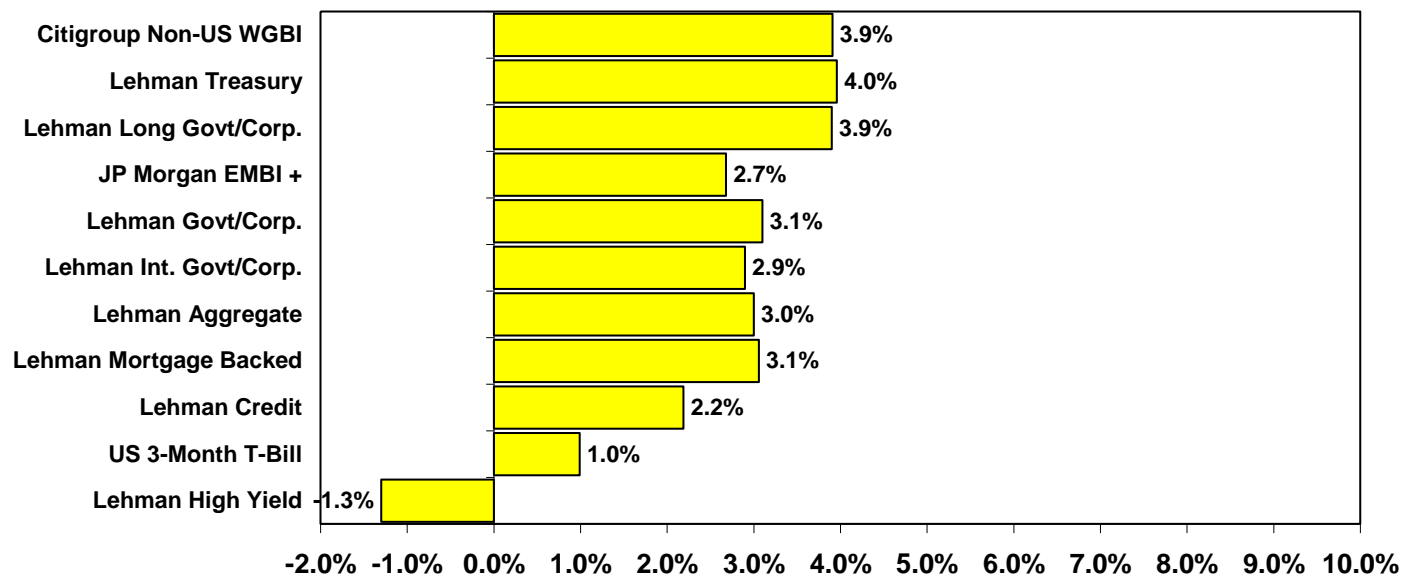
U.S. investment grade bonds finished the year with another strong quarter while high yield ended with the first negative quarter since 2005

As sub-prime and structured investment vehicles (SIV) issues and bank write-downs hit the headlines, rating agencies conducted mass downgrades

The Federal Reserve had two consecutive 25 bps rate cuts in both the Fed Funds and discount rates. The Fed also injected \$38 billion in temporary reserves

TED (3 mo T-bill and Libor difference) spread widens to highest since 1987, which is evidence of a liquidity drain

Fourth Quarter Fixed Income Performance



Private Equity

Fundraising Cools Off

Deal volume (domestic) during the fourth quarter was \$22B, down from the third quarter; total volume for the second half of the year was \$126.3B

Only 1 deal was over \$5B since July 2007 (domestic), versus 32 such deals during roughly the first half of the year

Slowdown in volume can be sourced to difficulties in financing due to the recent credit crisis

As the dollar weakens, potential acquisition opportunities become more attractive to foreign investors

(S&P 500 + 3%) returned -2.6% for the fourth quarter

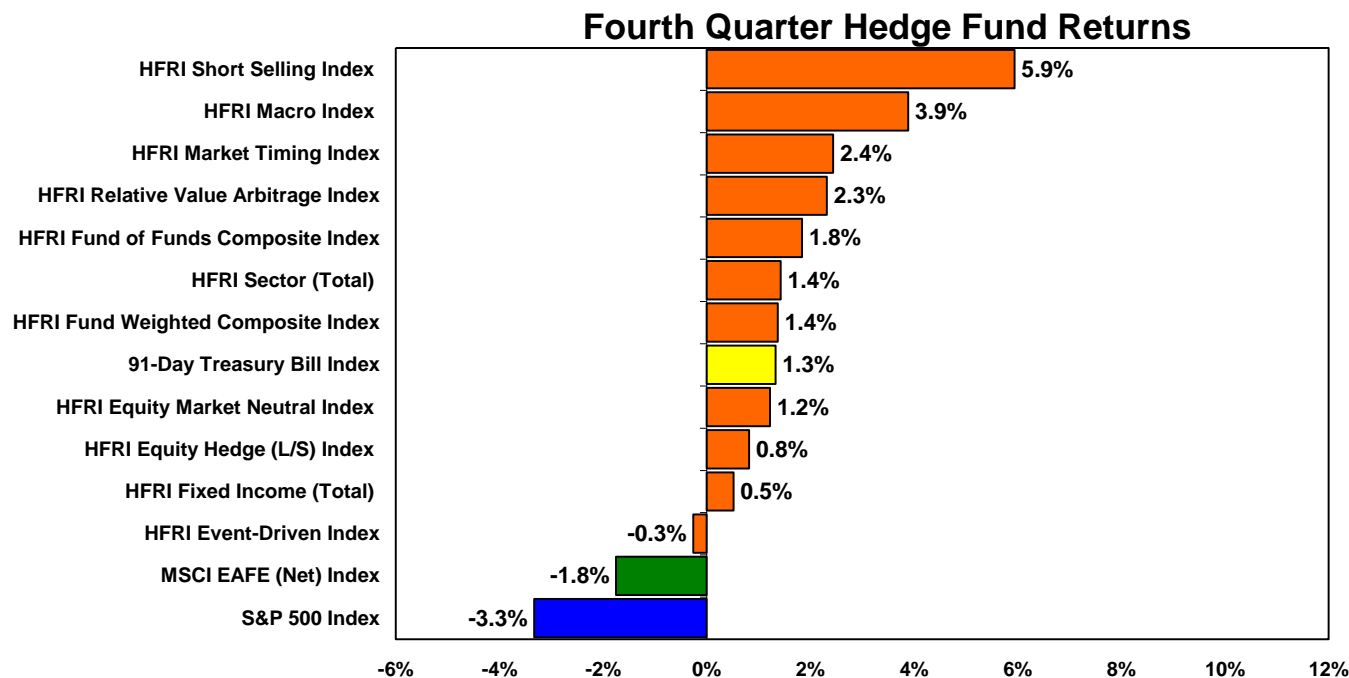
Hedge Funds

Composite Index Heads Public Equity Market

Hedge funds had inflows of \$30.4B for 4Q07

New-money attraction was the greatest for relative value arbitrage and event-driven strategies, bringing in \$9.9B and \$5.3B respectively

Strongest-performing strategy was short selling



Source: Hedge Fund Research, Inc. Includes over 6,000+ constituent funds. Includes both domestic and offshore funds. All funds report assets in USD. All funds report Net of All Fees returns on a monthly basis. Weighted Composite Index excludes fund of funds.

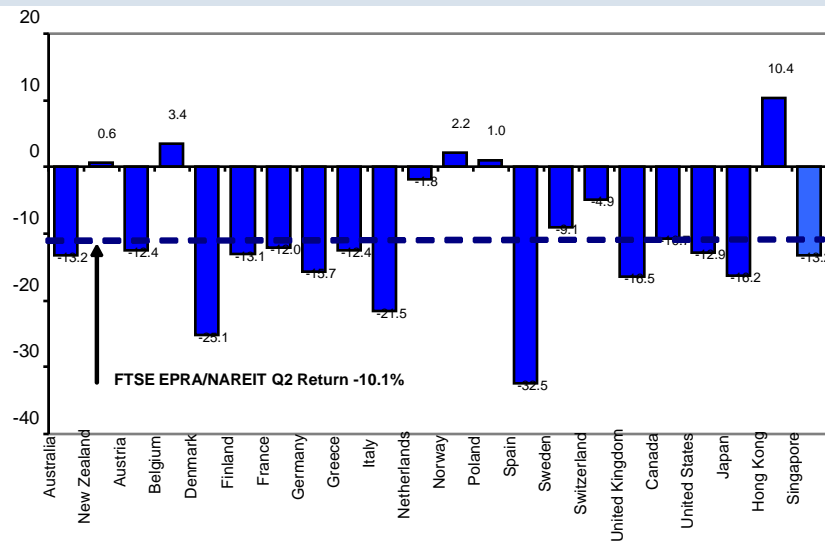
Global Real Estate

REITs Fell 10% in Q4 Due to Concerns About Global Slowdown

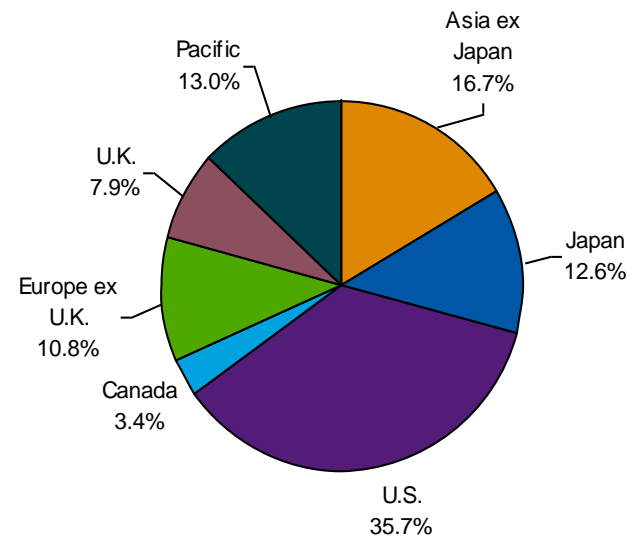
The FTSE EPRA/NAREIT Global Equity Index posted a –10.1% return for the fourth quarter due to a loss of greater than 10% within the three major countries that make up more than half of the index, the U.S., Japan and the U.K.

Hong Kong was the only country to post a double digit-gain over the quarter, driven primarily by the strength of the Chinese economy

Q4 Returns by Country



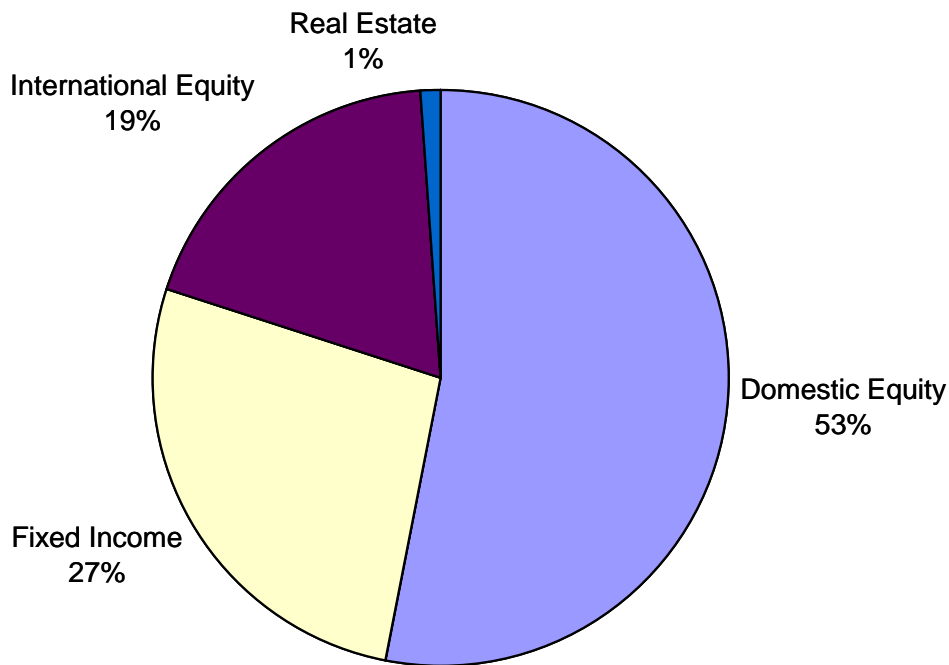
Equity REIT Regional Weights



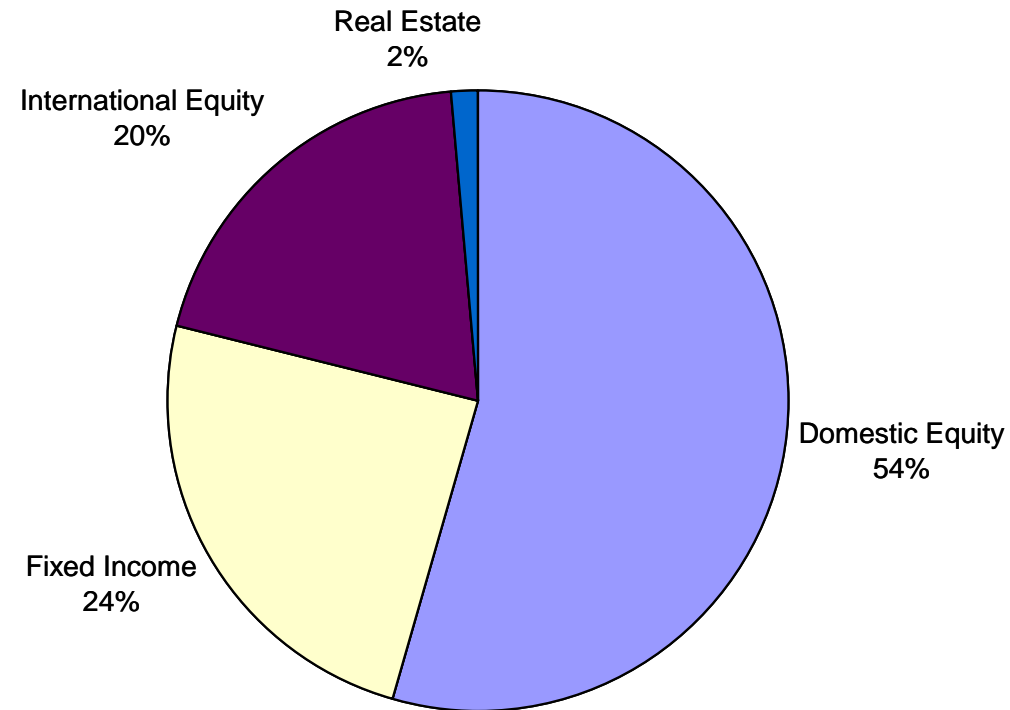
ASRS Total Fund Performance

Total Fund Asset Allocation December 31, 2007

Policy Adjusted for Transition into Real Estate and Private Equity



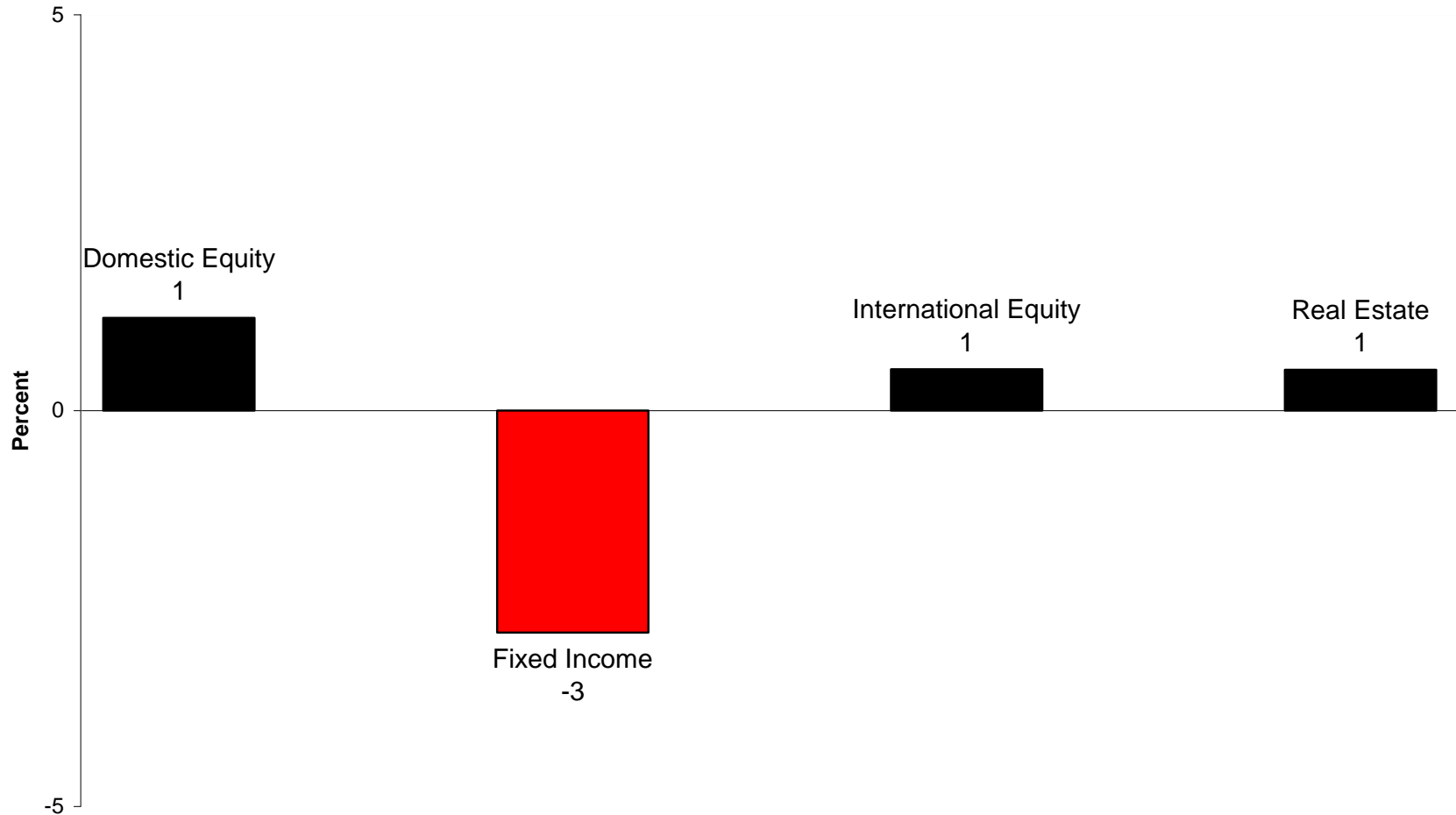
Actual Asset Allocation



Total Fund Asset Allocation

December 31, 2007

Actual Asset Allocation vs. Policy Adjusted for Transition into Real Estate and Private Equity



Total Fund Performance

For Periods Ending December 31, 2007

	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>Inception</u>
1) ASRS Total Fund (Net)	6.6%	9.0%	12.5%	7.7%	10.9%
Benchmark*	8.1%	9.3%	12.2%	6.8%	10.7%
Excess Return	-1.5%	-0.3%	0.3%	0.9%	0.2%

* Interim Benchmark (current): 39% S&P 500, 7% S&P 400, 7% S&P 600, 27% LB Aggregate, 19% MSCI ACWI ex US, and 1% NPI+100 bps

Note: Interim Benchmark incorporates a proration of 5% real estate and 5% private equity

Policy History:

7/1/75-12/31/79 – 40% S&P 500/60% LB Aggregate

1/1/80-12/31/83 – 50% S&P 500/50% LB Aggregate

1/1/84-12/31/91 – 60% S&P 500/40% LB Aggregate

1/1/92-12/31/94 – 50% S&P 500/40% LB Aggregate/10% EAFE

1/1/95-6/30/97 – 45% S&P 500/40% LB Aggregate/15% EAFE

7/1/97-12/31/99 – 50% S&P 500/35% LB Aggregate/15% EAFE

1/1/00-9/30/03 – 53% S&P 500/30% LB Aggregate/17% EAFE

10/1/03-12/31/06 – 53% S&P 500/26% LB Aggregate/15% MSCI EAFE/ACWI ex US⁽¹⁾/6% NPI+100 bps

1/1/07-present – 31% S&P 500/7% S&P 400/7% S&P 600/26% LB Aggregate/18% MSCI ACWI ex US/6% NPI+100 bps/5% Russell 3000+300 bps

⁽¹⁾ MSCI EAFE/ACWI ex US Benchmark is the MSCI EAFE prior to 10/1/05 and the MSCI ACWI ex US thereafter

Total Fund Performance

For Periods Ending December 31, 2007

	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>Inception</u>
ASRS Total Fund (Net)	6.6%	9.0%	12.5%	7.7%	10.9%
2) Actuarial Assumption	8.0%	8.0%	8.0%	8.0%	7.6%
Excess Return	-1.4%	1.0%	4.5%	-0.3%	3.3%
3) Asset Allocation Target	8.3%	7.7%	7.7%	8.2%	N/A
Excess Return	-1.7%	1.3%	4.8%	-0.5%	N/A
4) CPI Inflation + 3.75%	7.9%	7.1%	6.8%	6.4%	7.6%
Wage Inflation + 3.75%	10.9%	9.7%	8.1%	7.7%	8.3%
Excess Return - CPI	-1.3%	1.9%	5.7%	1.2%	3.3%
Excess Return - Wage	-4.3%	-0.7%	4.4%	-0.1%	2.6%

Supplemental Comparison Information*

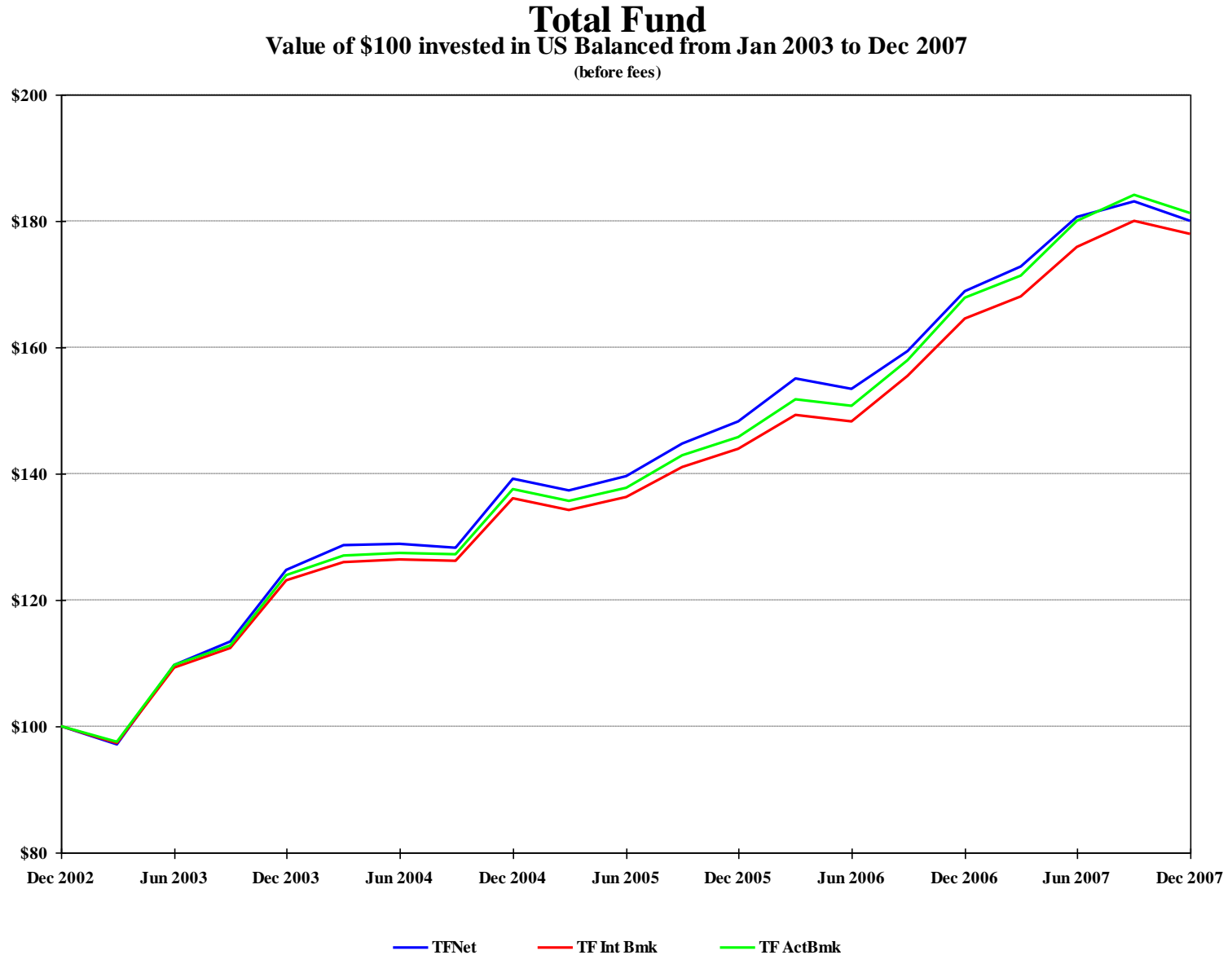
For Periods Ending December 31, 2007

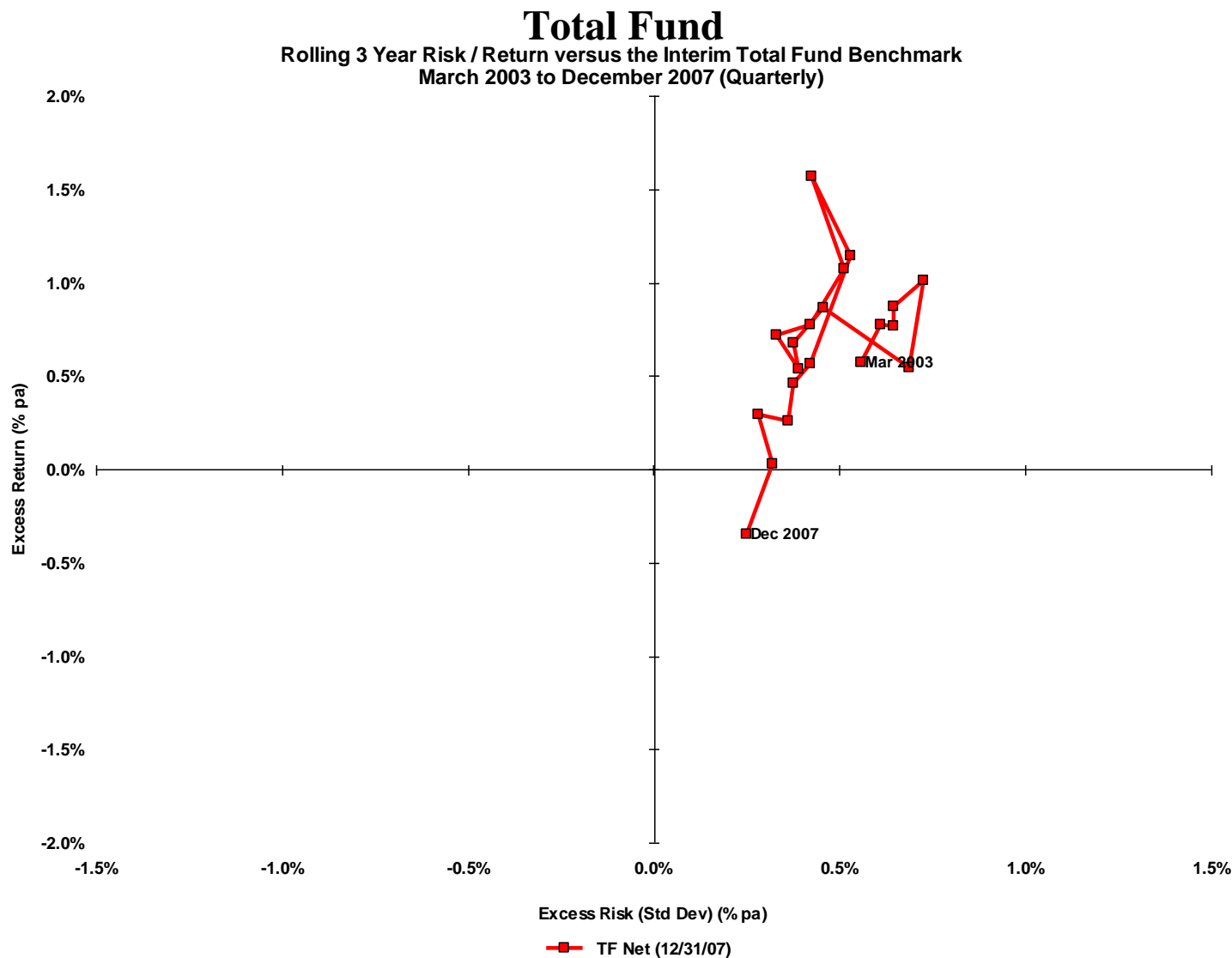
	1 Year	3 Years	5 Years	10 Years	15 Years
Russell/Mellon Trust Universes					
Master Trust Funds - Total Funds	73	63	55	51	49
Total Funds - Public	82	80	72	65	48
Total Funds Billion Dollar - Public	88	84	75	74	54
Total Funds - Corporate	69	62	53	48	51
Wilshire Trust Universe Comparison Service					
Master Trusts - All	64	51	39	40	40
Public Funds	61	50	38	36	20
Public Funds Greater than \$1.0 Billion	89	80	57	46	30
Corporate	66	54	43	45	50
Callan Associates Inc.					
Total Funds	77	65	54	53	47
Public Funds	83	68	58	59	38
Public Funds - Large (>1B)	95	91	78	72	46
Corporate Funds	73	64	54	50	49

*The information contain herein is for comparison purposes only and is not a Total Fund performance benchmark. Peer universe comparisons are subject to several limitations, including: peer groups are not comprehensive, several funds are included in multiple peer groups, peer groups are constructed using gross of fees returns, and survivorship bias in that poorly performing funds may no longer continue to report results.

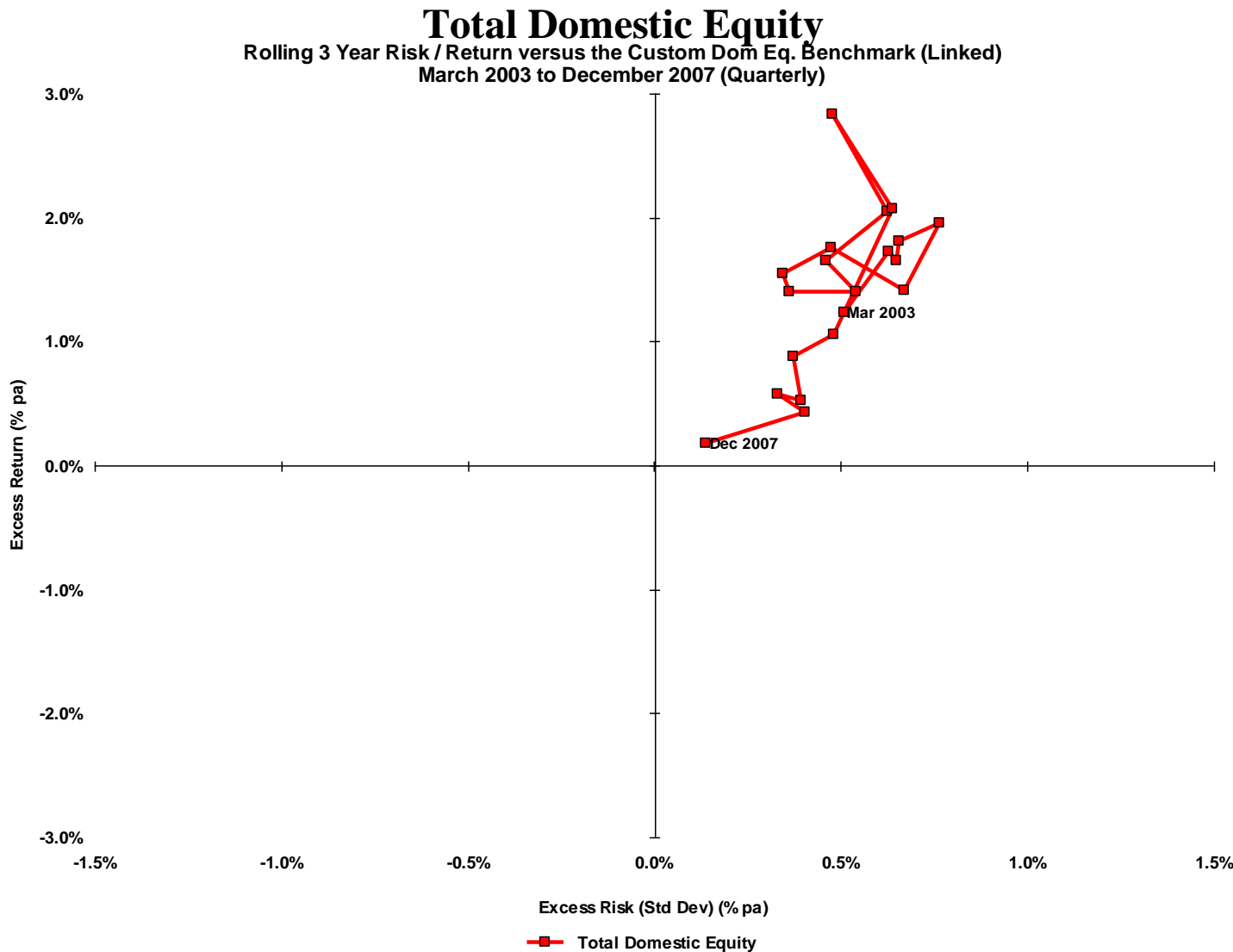
Note: Universes are constructed with gross of fees returns; therefore, the ASRS rank is based on gross of fees returns.

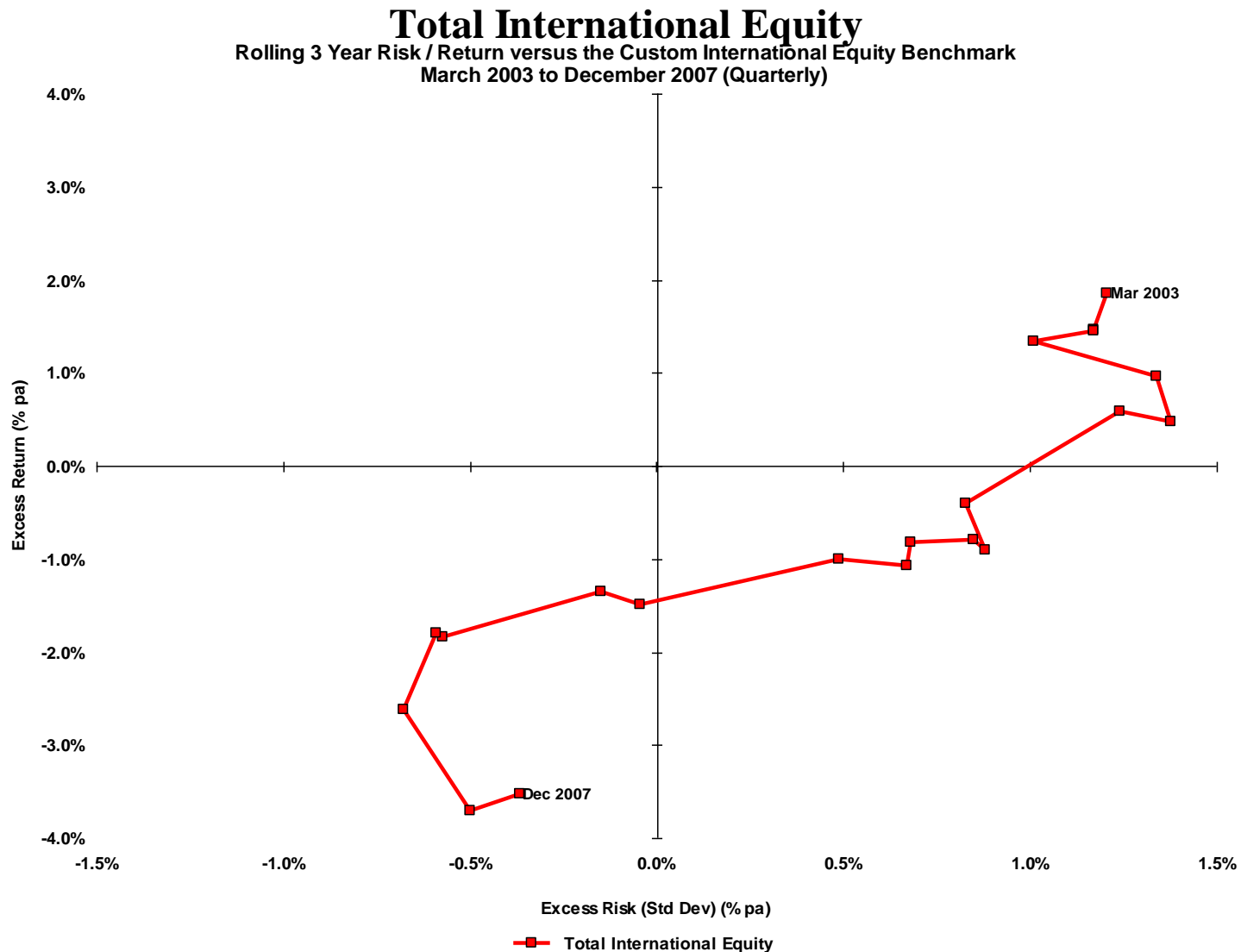
Total Fund Growth











Performance vs. Benchmarks

For the 3 Years Ending December 31, 2007

	<u>Return</u>	<u>Assumed ROR</u>	<u>Std. Dev.</u>
Total Fund	9.0%	7.7%	5.1%
Benchmark ⁽¹⁾	9.3%		4.8%
Domestic Fixed	4.6%	4.7%	3.2%
LB Aggregate	4.6%		3.3%
Domestic Equity	8.6%	8.5%	6.8%
S&P Custom Bmk ⁽²⁾	8.5%		6.7%
Intl. Equity	15.9%	8.7%	8.5%
MSCI Custom Bmk ⁽³⁾	19.4%		8.9%
Real Estate	N/A	-	N/A

⁽¹⁾ Interim Benchmark (current): 39% S&P 500, 7% S&P 400, 7% S&P 600, 27% LB Aggregate, 19% MSCI ACWI ex US, and 1% NPI+100 bps

Note: Interim Benchmark incorporates a proration of 5% real estate and 5% private equity

⁽²⁾ S&P 500 prior to 1/1/07 and 74% S&P 500, 13% S&P 400, 13% S&P 600 thereafter

⁽³⁾ MSCI EAFE/ACWI ex US Benchmark is the MSCI EAFE prior to 10/1/05 and the MSCI ACWI ex US thereafter

Performance vs. Benchmarks

For the 5 Years Ending December 31, 2007

	<u>Return</u>	<u>Assumed ROR</u>	<u>Std. Dev.</u>
Total Fund	12.5%	7.7%	8.1%
Benchmark ⁽¹⁾	12.2%		7.6%
Domestic Fixed	4.4%	4.8%	3.3%
LB Aggregate	4.4%		3.4%
Domestic Equity	13.8%	8.7%	10.5%
S&P Custom Bmk ⁽²⁾	12.7%		10.0%
Intl. Equity	21.0%	8.8%	14.3%
MSCI Custom Bmk ⁽³⁾	23.4%		13.8%
Real Estate	N/A	-	N/A

⁽¹⁾ Interim Benchmark (current): 39% S&P 500, 7% S&P 400, 7% S&P 600, 27% LB Aggregate, 19% MSCI ACWI ex US, and 1% NPI+100 bps

Note: Interim Benchmark incorporates a proration of 5% real estate and 5% private equity

⁽²⁾ S&P 500 prior to 1/1/07 and 74% S&P 500, 13% S&P 400, 13% S&P 600 thereafter

⁽³⁾ MSCI EAFE/ACWI ex US Benchmark is the MSCI EAFE prior to 10/1/05 and the MSCI ACWI ex US thereafter

MERCER



MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN